23rd Medical Group

Moody Air Force Base Georgia

Innovations in Diabetic Management 2011

Introduction

The Health (Disease) Manager at the 23rd Medical Group worked closely with the Patient Centered Medical Home providers and their teams. They concluded that diabetic patients are at high risk for the development of health related complications that affect them both mentally and physically. A review of the literature revealed that over the past 20 years, the number of people in the US with diabetes has more than doubled. The CDC estimated that 18.2 million people in the US (6.3% of the total population) have diabetes and of those, 5.2 million are undiagnosed. Diabetes will cost the healthcare system $3.35 trillion dollars by 2020. Patients who suffer complications from diabetes experience decreased quality of life and often depression. In evaluating the diabetics enrolled to the 23rd MDG it was determined that this group of patients were at significant risk for complications due to lack of Hemeglobin A1C (Hgb A1C) and Low-density Lipoprotein (LDL) control secondary to substandard continuity of care and a lack of motivation on the part of the patients. As one patient put it, "Oh, I'm glad it's only diabetes". Past practices at the 23rd MDG in managing the diabetic population have not been successful or sustained.

In January of 2011, a process improvement program was adopted to address the care of diabetic patients enrolled in the 23rd MDG. This program was the result of a multidisciplinary team to include: the Health Care Integrator (HCI), physician champion, health (disease) management nurse, Health and Wellness Center- Registered Dietician (HAWC – RD), exercise physiologist, pharmacist, psychologist and feedback from diabetic patients enrolled in the 23rd MDG. The goal of the program was to reduce the risks of diabetes through improved Hgb A1C control and LDL reduction. Another goal was to sustain improvements through education and motivational interviewing and identifying which plan of care was most effective for each of the patients; classroom education, class combined with individual education or individual education alone.

The Health Manager utilized Care Point to identify patients. HEDIS metrics for overall diabetic Hgb A1C and LDL control were utilized to track success of interventions. She also established a tracker so that those attending the different forms of education could show impact by measuring their progress with Hgb A1C and LDL control.

Methods

Identifying and then appropriately implementing interventions related to individual learning needs was key to patient's individual ownership and management of their disease process. There were three different plans of care identified.

(1) The individual responses to the education class alone

(2) The education class combined with meeting the health management nurse one-on-one
(3) Meeting with health management nurse alone

The goal was specifically to improve management of more complex diabetic patients and in particular, those who were non-compliant, uncontrolled, had complex comorbid conditions, and/or were receiving network care through endocrinology. Patients were interviewed telephonically and specifically identified to attend one of the three educational/intervention tracts. Factors to consider include but are not limited to the following: not all patients should or want to attend a formal educational event due to work schedule and availability and/or their individual learning/language challenges. In addition, there were several patients enrolled to the 23rd MDG in which English was not their first language and they did not feel comfortable in a classroom atmosphere.

These patients were scheduled to meet with the health management nurse after their appointment with the PCM whenever there was a concern about compliance or control. This was termed a 20/20 visit. The health management nurse employed motivational interviewing with these patients, explored potential/actual barriers and helped the patient set goals. By learning their barriers to success, they were able to focus on their individual goals. Patients were then able to focus on behavioral modification and develop strategies to avoid potential pitfalls. Learning basic pathophysiology, potential complications, and one-on-one glucometer teaching were fundamental steps in this nurse-run visit. Follow up was done telephonically, unless the need for one-on-one follow-up is identified. In addition, these patients were encouraged to call the health management nurse with any questions or concerns they may have. As a part of the practice, all telehealth phone calls from diabetic patients were directed to the health management nurse instead of the team nurse to maintain/build this trust relationship and continuity of care.

Additionally, all diabetic patients were issued two glucometers, one for home use and one for work/travel. This was to done to optimize the availability for self-monitoring of glucose levels. The glucometers issued were upgraded to include download capability for the patients as well as smaller blood sample size required for testing and ease of use.

For those patients that attend the multidisciplinary classroom based offering, they received education from the following professional staff: nutritionist, exercise physiologist, psychologist, pharmacist and health management nurse. The itinerary included:

Basic pathophysiology review

Potential diabetic complications

Diabetic medication review – interactions/potential side effects

Basic diabetic diet – carb counting

Basic exercise plan for diabetics

Individual review of glycemic control and hyperlipidemia

Eye, dental and foot care

Stress reduction and behavioral strategies for setting and attaining goals

In identifying the need for proactive management of this population, resources were carved from the existing FHI structure. There is a board-certified Family Health provider champion, the health (disease) management nurse was taken from Family Health PCMH and BHOP availability is established on an as-needed basis from the Mental Health Flight. The appointment and realignment of these resources were coordinated through the 23rd Medical Groups senior leadership.

Staff education included several classes with the glucometer representative to train/certify clinical staff from the technicians to the providers. Inservices to the professional staff and executive committee of medical staff were completed in relationship to CPG and program development.

The health (disease) management nurse completed 32 continuing education units through an advanced diabetes management class. In addition, she completed conversation map training with the Health and Wellness Center personnel to facilitate group dialogue related to care and management of diabetes. Lastly, she attended the Tri-Service BHOP innovation conference, focusing on offerings related to motivational interviewing.

The 23rd MDG currently has 195 patients diagnosed with diabetes enrolled of which 56 have attended the formal diabetic education class, and 80 face to face meetings have occurred with the health management nurse. Data is limited to 6 months of collection; however, there is clearly an improvement in both Hgb A1C control and LDL control since the initiation of the project. Data for the first 6 months is limited to 14 patients who have attended the class solely, 28 patients who have attended the class and had a face to face meeting with the health management nurse, and 22 patients who have met with the health management nurse exclusively. Sources for data included CarePoint and CHCS.

Results:

Data will be broken down with the population studies based on the educational tract utilized.

Formal Diabetes Education class only: the 14 participants demonstrated a statistically insignificant increase in Hgb A1C and a 5 point reduction in LDL.

Formal Diabetes Education class with face-to-face visit: the 28 participants demonstrated a decrease in Hgb A1C of 1.6 and a 6 point reduction in LDL.

Face-to-face visit only: the 22 participants demonstrated a decrease in Hgb A1C of 1.4 and a 25 point reduction in LDL.

Overall impact to the diabetic population as a whole as demonstrated through HEDIS metrics/PCMH are as follows:

Hgb A1C <7 improved 3% HEDIS/10% PCMH

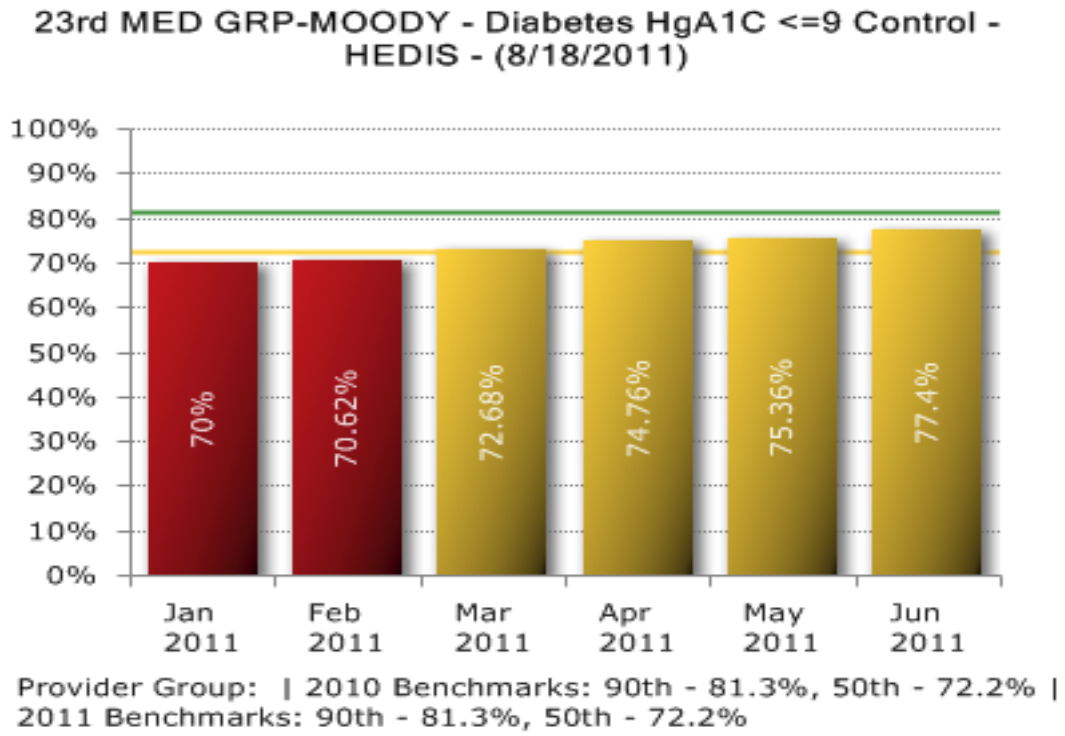
Hgb A1C <8 improved by 6.6% HEDIS/10% PCMH

Hgb A1C <9 improved by 9% HEDIS/13% PCMH

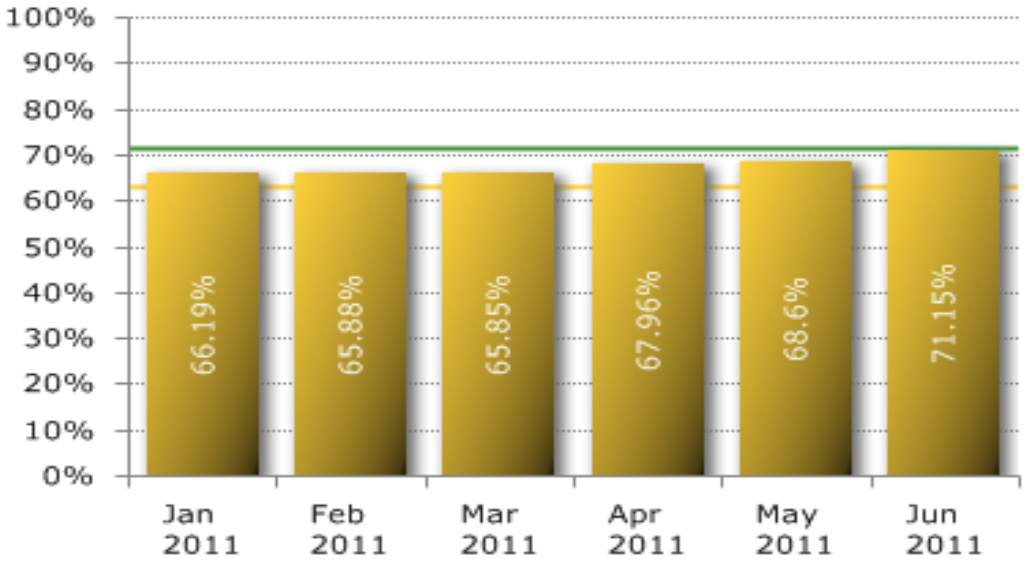
LDL control improved .5% HEDIS/2.6% PCMH

This is an on-going project with January 2012 as the first anniversary date. The process is evolving with several lessons learned. The teen population does not feel comfortable in the classroom setting with other adult diabetics. They see themselves as young and different from the other participants as most have Type 1 diabetics. Therefore a plan has been adopted to start a support group in the form of conversation maps training. Another group that has not responded as well to formal education is a group of females that have had gastric bypass or lap banding. Plans are to initiate a conversation map group for them as well. Brand new diabetics should have a waiting period before class attendance as they are often in denial and struggling in acceptance of the diagnosis. All newly diagnosed diabetics meet over the course of the first 2 months with the health management nurse and when ready, are scheduled for the diabetic education class. We came to the realization that expansion of the program is necessary to include a concentrated effort to identify and provide early education to those patients with impaired fasting glucose; as those are the diabetics of tomorrow. Currently, the impaired fasting glucose patients are scheduled to meet with the health management nurse and provided education to include the importance of BMI reduction of 5-7% through diet and exercise.

Below is a summary of the metrics:

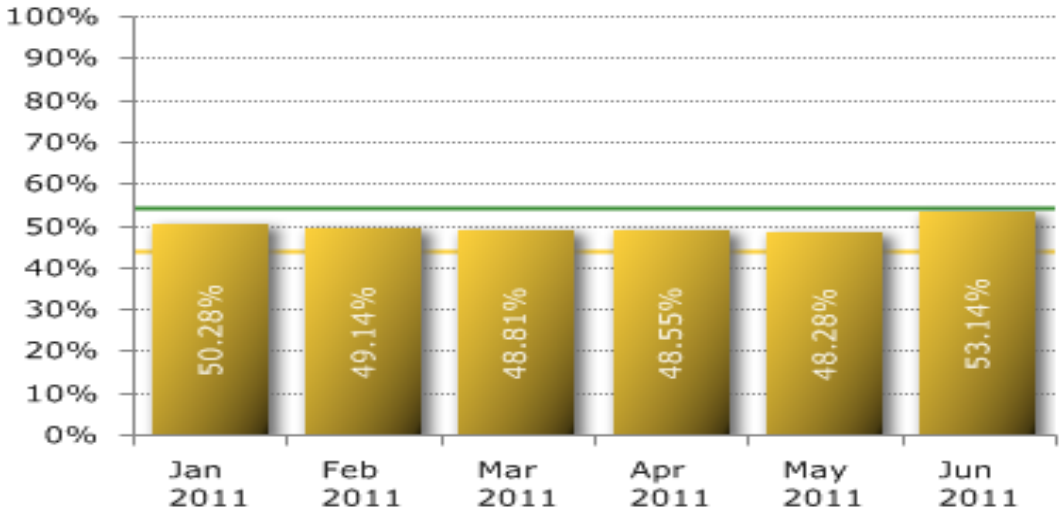


23rd MED GRP-MOODY - Diabetes HgA1C <8 Good Control - HEDIS - (8/18/2011)



Provider Group: | 2010 Benchmarks: 90th - 71.5%, 50th - 63.3% | 2011 Benchmarks: 90th - 71.5%, 50th - 63.3%

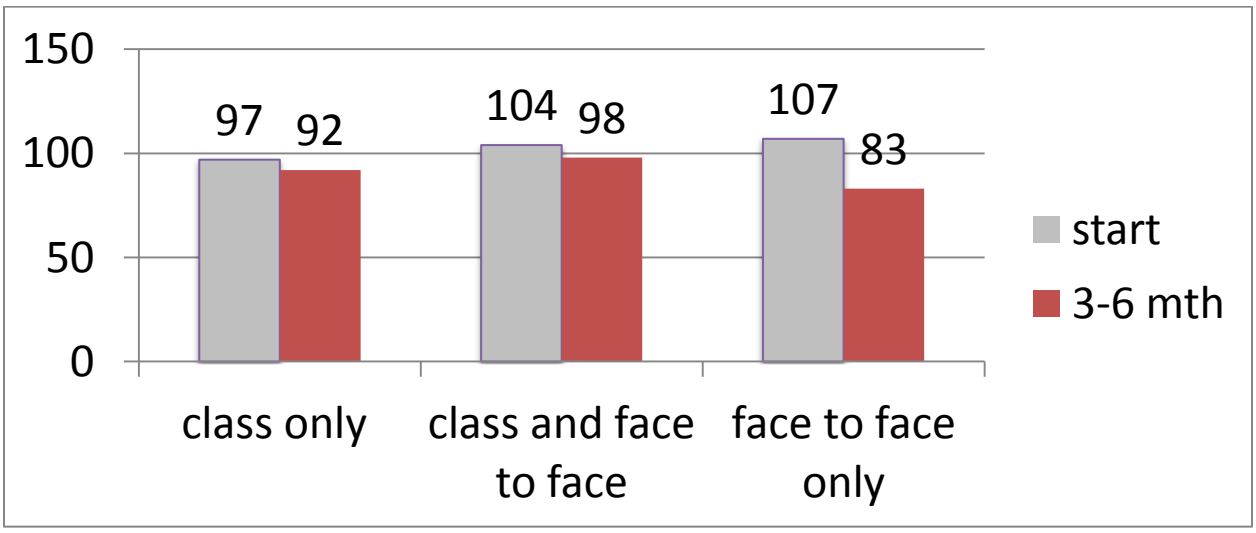
23rd MED GRP-MOODY - Diabetes HgA1C <7 Good Ctrl no Comorb - HEDIS - (8/18/2011)



Provider Group: | 2010 Benchmarks: 90th - 54.3%, 50th - 43.7% | 2011 Benchmarks: 90th - 54.3%, 50th - 43.7%

HGB A1C Control Comparing Class and Face to Face Teaching (down indicates improved control)

LDL Control Comparing Class and Face to Face Teaching (down indicates improved control)



Summary: Identifying the appropriate types of interventions based on a patient's background, barriers to success and their individual needs can have a significant impact in the successful management of their disease. Sustained success is not yet established, however early results indicate that the interventions provided and the diabetic program management facilitated by the health

(disease) management nurse can have a significant impact on the quality of life for the diabetic patients at the 23rd Medical Group. For a successful diabetic management program, it appears to pays off when you target those patients with comorbidities as they stand to gain the most from your interventions.